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THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the International Commission on Zoological Nomenclature

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

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NOTICES PRESCRIBED BY THE INTERNATIONAL CONGRESS OF ZOOLOGY

The following notices are given in pursuance of decisions taken, on the recommendation of the International Commission on Zoological Nomenclature (see 1950, *Bull. zool. Nomencl.* **4** : 51-56, 57-59), by the Thirteenth International Congress of Zoology, Paris, July 1948 (see 1950, *Bull. zool. Nomencl.* **5** : 5-13, 131).

(a) Date of commencement by the International Commission on Zoological Nomenclature of voting on applications published in the "Bulletin of Zoological Nomenclature"

NOTICE is hereby given that normally the International Commission will start to vote upon applications published in the *Bulletin of Zoological Nomenclature* on the expiry of a period of six calendar months from the date of publication in the *Bulletin* of the applications in question. Any specialist who may desire to comment upon any of the applications published in the present Part (vol 6, Part 4) of the *Bulletin* is accordingly invited to do so in writing to the Secretary to the Commission as quickly as possible and, in any case, in sufficient time to enable the communication in question to reach the Secretariat of the Commission before the expiry of the six-month period referred to above.

Notices prescribed by the International Congress of Zoology (continued)**(b) Notice of the possible use by the International Commission on Zoological Nomenclature of its plenary powers in certain cases**

NOTICE is hereby given that the possible use of the plenary powers, is involved in applications published in the present Part of the *Bulletin of Zoological Nomenclature* (Vol. 6, Part 4) in relation to the following names :—

- (1) *quinqueloba* Goldfuss, 1831 (as published in the binominal combination *Asterias quinqueloba*) (Class Asteroidea), proposed designation of lectotype for (Z.N.(S.)514).
- (2) *Hoplites* Neumayr, 1875, proposed validation of, and designation of type species for (Class Cephalopoda, Order Ammonoidea) (Z.N.(S.)533).
- (3) *Anquina* Scopoli, 1777 (Class Nematoda), possible suppression of (Z.N.(S.)588).

2. Comments received in sufficient time will be published in the *Bulletin*; other comments, provided that they are received within the prescribed period of six calendar months from the date of publication of the present Part, will be laid before the International Commission on Zoological Nomenclature at the time of commencement of voting on the application concerned.

3. In accordance with the arrangement agreed upon at the Session held by the International Commission on Zoological Nomenclature in Paris in 1948 (see 1950, *Bull. zool. Nomencl.* 4 : 56), corresponding Notices have been sent to the journals *Nature* and *Science*.

FRANCIS HEMMING,

*Secretary to the International Commission on
Zoological Nomenclature.*

Secretariat of the
International Commission on
Zoological Nomenclature,
28, Park Village East, Regent's Park,
LONDON, N.W.1, England.

28th September, 1951.

ON THE CORRECT NAME FOR THE YELLOW RATTLE-
SNAKE FROM THE COLORADO RIVER BASIN

By ANGUS M. WOODBURY (*University of Utah, Salt Lake City, Utah, U.S.A.*)
and

HOBART M. SMITH (*University of Illinois, Urbana, Ill., U.S.A.*)

(Commission's reference Z.N.(S.)176)

1. In 1929 (*Bull. Univ. Utah*, **20** (6) : 3) Woodbury published the name *Crotalus concolor* and applied it to a race of rattlesnakes of the Colorado River Basin (type locality at the base of the Henry Mountains, Garfield County, Utah) now assigned to the species *Crotalus viridis*.

2. In 1930 (*Trans. San. Diego Soc. nat. Hist.* **6** : 111) Klauber published the name *Crotalus confluentus decolor* and applied it to a race of rattlesnakes of the Colorado River Basin (type locality at Grand Junction in western Colorado) now also assigned to the species *Crotalus viridis*.

3. In the present state of knowledge *Crotalus viridis concolor* Woodbury, 1929, and *Crotalus viridis decolor* Klauber, 1930, are regarded as applying to the same race, and *C. viridis concolor* Woodbury, by virtue of its priority, was universally regarded as the valid name for the race concerned until 1940.

4. In 1940 ("Genera *Sistruras* and *Crotalus*." *Spec. Publ. Chicago Acad. Sci.* **4** : 216-217) Gloyd applied the name *Crotalus viridis decolor* Klauber to the sub-species in question on the grounds that he regarded *concolor* Woodbury as "preoccupied by *concolor* Jan (1859 : 153), a *nomen nudum* which originally appeared as a variety of *C. durissus (horridus)*, and was later placed in the synonymy of *C. horridus* by Garman (1883 : 175) and Stejneger (1895 : 427) . . . the association of Jan's name with *C. horridus* by subsequent reviewers of the genus gives it a status as a synonym of that species, and *concolor* Woodbury (1929) is therefore a homonym."

5. The facts about the alleged name *concolor* Jan are as follows :

- (1) As stated by Gloyd in the passage quoted above, the name *Crotalus durissus* var. *concolor* Jan was published in 1859 (*Prodrome d'une iconographie descriptive des ophidiens et description sommaire de nouvelles espèces de serpents venimeux*, Paris : 153) as a *nomen nudum*.
- (2) In 1883 Garman (*Mem. Mus. comp. Zool.* **8** : 175) cited *Crotalus durissus* var. *concolor* Jan as a questionable or possible synonym of *Crotalus horridus* Linnaeus, 1758.
- (3) In 1895 Stejneger (*Ann. Rept. U.S. Nat. Mus.* **1895** : 427) also cited *Crotalus durissus* var. *concolor* Jan as a questionable or possible synonym of *Crotalus horridus* Linnaeus, 1758.

- (4) Finally, Gloyd (1940:171) cited the name *Crotalus durissus* var. *concolor* Jan as a synonym of *Crotalus horridus horridus* Linnaeus without a question.

6. The question now arises as to which, if any, of the above actions conferred availability on the trivial name *concolor* Jan.

7. There can be no doubt that Gloyd conferred availability on the name *concolor* when he definitely synonymised it with the previously published name *Crotalus horridus horridus* Linnaeus, assuming it had not already acquired availability by any earlier action; but it is clear from the decisions taken by the International Congress of Zoology in Paris in 1948, on the advice of the International Commission on Zoological Nomenclature, that Gloyd's action in itself conferred availability on the name *concolor* only as from 1940, and that the name should be attributed not to Jan but to Gloyd himself. (cf. *Bull. Zool. Nomencl.* 4:145-146, 563). Thus, Gloyd's action in establishing the name *C. horridus concolor* Gloyd, 1940, could in no circumstances have had the effect of invalidating *concolor* Woodbury, 1929, since *concolor* Gloyd, 1940, is itself an invalid junior homonym of *concolor* Woodbury, 1929.

8. The only relevant issue, therefore, and the one which has been the subject of disagreement among specialists, is whether availability was conferred upon the trivial name *concolor* by Garman (1883) when he published that name (which had previously existed only as a *nomen nudum*) as a questionable synonym of *Crotalus horridus* Linnaeus, 1758. Gloyd (loc. cit.) and Smith (*Copeia*, 1943:251) have argued that Garman's action in 1883 did confer availability on the trivial name *concolor*, while the Stejneger and Barbour checklist (*Bull. M.C.Z.*, Harvard, Mass., 1943), Woodbury (*Copeia*, 1942:258) and Klauber (*Trans. San. Diego Soc. nat. Hist.* 6:242) have taken the opposite view.

9. The object of the present paper is a twofold one:

- (1) to secure an authoritative ruling from the International Commission on the question whether the citation of a *nomen nudum* as a questionable or possible synonym of an available name confers availability upon the name so cited; and
- (2) to settle definitely the question of the correct name of the race of yellow rattlesnake from the Colorado River Basin.

10. On the second of these questions, in view of the difference of opinion which has arisen during the last ten years on this matter, the acceptance of either of the two alternative solutions would cause a certain amount of short-term disturbance and confusion. We should like to propose, therefore, that the matter be settled once and for all by the Commission placing on the *Official List of Specific Trivial Names in Zoology* whichever of the two names *concolor* Woodbury, 1929, or *decolor* Klauber, 1930 turns out, in the light of the decision on the matter of principle raised in point (1) of the previous paragraph, to be the correct name under the *Règles* for the subspecies concerned.

**ON THE QUESTION OF THE CORRECT TRIVIAL NAME
FOR THE YELLOW OR MIDGET RATTLESNAKE OF
THE COLORADO RIVER BASIN**

By LAURENCE M. KLAUBER (*San Diego, California, U.S.A.*)

(Commission's reference Z.N.(S.)176)

(Extract from a letter dated 9th January, 1951)

I greatly appreciate the complete discussion contained in your letter of January 3rd (Z.N.S.)176). . . . I had not known that a ruling had been sought in the particular case of the yellow rattlesnake of the Colorado River Basin. The following has a bearing, for the name "*Crotalus durissus cincolor* [sic] J." was placed in the synonymy of *Crotalus horridus* Linnaeus in a paper entitled "The Ophidia of Michigan with an Analytical Key" by F. N. Notestein, Seventh Report, Michigan Academy of Science, pp. 111-125, at page 123 (1905). Undoubtedly *cincolor* was a misprint for *concolor*; the paper is full of an almost unbelievable number of typographical errors, as witness *Candisona* for *Caudisona*, *articandatus* for *atricaudatus*, and *dorissus* for *durissus* among the rattlers alone. Among the many misspelled names of authorities cited in the abbreviation list beginning at the bottom of page 122, is that of the author himself. This possibly explains why "J." is stated to stand for "Jordan", whereas "Jan" is intended.

May I say that, should the Commission, now having authority to conserve trivial names, desire to establish *C. v. concolor* Woodbury, 1929, as the proper name for the yellow or midget rattlesnake over *C. v. decolor* Klauber, 1930, I should not have the slightest objection. I believe the two names have been used with approximately equal frequency since their original publication. Gloyd mentions the problem in a footnote (Chicago Academy of Sciences, Special Publication No. 4, p. 216, 1940). I shall be pleased to see the question resolved, as I expect to publish a check list of the rattlers in a book now in course of preparation.

**ON THE CORRECT TRIVIAL NAME OF THE YELLOW
RATTLESNAKE OF THE COLORADO RIVER BASIN:
SUPPLEMENTARY NOTE**

By ANGUS M. WOODBURY (*University of Utah, Salt Lake City, Utah, U.S.A.*),
and

HOBART M. SMITH (*University of Illinois, Urbana, Ill., U.S.A.*)

(Commission's reference Z.N.(S.)176)

(Letter dated 10th April, 1951)

1. When we submitted to the International Commission on Zoological Nomenclature our application for a ruling regarding the trivial name properly applicable to the Yellow Rattlesnake of the Colorado River Basin, our sole object was to

obtain an authoritative pronouncement which would secure that for the future the same name was always applied to this snake. We ourselves had no special preference for either of the two possible names, viz., (1) *concolor* Woodbury, 1929 (as published as a subspecific trivial name in the combination *Crotalus viridis concolor*), (2) *decolor* Klauber, 1930 (as published as a subspecific trivial name in the combination *Crotalus confluentus decolor*).

2. The Secretary to the International Commission has informed us that, since our application was sent to the press, he has received a letter from Mr. Laurence M. Klauber (*San Diego, California*) drawing attention to the use of the trivial name *concolor* in the genus *Crotalus* prior to its use by Woodbury in 1929, namely by Notestein (F. N.) who in 1905 definitely synonymised what he called "*Crotalus durissus cincolor* [sic] J." with *Crotalus horridus* Linnaeus. Mr. Hemming has furnished us with a copy of Mr. Klauber's letter and we agree that the information so brought forward introduces a radical change into the situation. It is true that in Notestein's paper Jan's manuscript name *concolor* was misspelt "*cincolor*", but, in view (especially) of the large number of other misprints in Notestein's paper (of which Mr. Klauber gives a number of examples in his letter), this variant must certainly be regarded as falling within the scope of Article 19 and therefore as being the equivalent of *concolor*. In these circumstances, the subspecific trivial name *concolor* Woodbury, 1929, not only is possibly a junior homonym of *concolor* Garman, 1883 (the question on which we asked for a ruling from the International Commission), but is also an undoubted junior homonym of *concolor* (emend. of *cincolor*) Notestein, 1905 (a fact of which we were previously unaware).

3. In the light of the developments described above, there is no longer any doubt as to the correct name of the yellow rattlesnake of the Colorado River Basin, for the final elimination, as a homonym, of the name *concolor* Woodbury, 1929, leaves *decolor* Klauber, 1930, as indisputably the oldest available name for that snake. Accordingly, while we still ask the International Commission to give a ruling on the general question whether the qualified citation of a trivial name in a synonymy confers any availability upon that trivial name, we desire to substitute for the second of the proposals which we submitted (namely that set out in paragraph 10 of our application) a proposal that the trivial name *decolor* Klauber, 1930 (as published in the combination *Crotalus confluentus decolor*) be placed upon the *Official List of Specific Trivial Names in Zoology*.

SUGGESTED ADOPTION BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE OF A "DECLARATION" CLARIFYING THE QUESTION OF THE AVAILABILITY OF A TRIVIAL NAME HAVING AS ITS ONLY "INDICATION" A QUALIFIED REFERENCE TO A PREVIOUSLY PUBLISHED TRIVIAL NAME

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

(Commission's reference Z.N.(S.)349)

1. The application as originally submitted to the International Commission on Zoological Nomenclature by Dr. Angus M. Woodbury and Dr. Hobart M. Smith (University of Illinois, Urbana, Ill.) asking for a ruling on the question of the oldest available trivial name for the race of yellow rattlesnakes of the Colorado River Basin raised a question of principle which, under the decisions regarding procedure taken by the Thirteenth International Congress of Zoology, Paris, 1948 (see 1950, *Bull. zool. Nomencl.* **4** : 136-137) can be resolved by the Commission only by the adoption of a *Declaration* formally interpreting the provision of the *Règles* in question, the series "Opinions" being now reserved for decisions on individual nomenclatorial questions not involving any novel interpretation of the *Règles*.

2. *The question of principle at issue:* The question of principle raised by Dr. Angus M. Woodbury and Dr. Hobart M. Smith may be stated shortly as follows: Where a trivial name is published without any descriptive matter of any kind, the sole "indication" given being that the name in question is doubtfully or provisionally synonymized with another trivial name that has been duly published with a "description, definition or indication," is the trivial name so published (1) to be treated as having been published with an indication in virtue of the qualified synonymy given by its original author, or (2) is the name in question to be treated as having been published without an "indication" and therefore as a *nomen nudum*?

3. *Restriction of question to status of trivial names published as questionable synonyms before 1st January, 1931:* The provisions in Article 25 relating to what constitutes an "indication" for specific trivial names (either names for new species or substitute names to replace invalid specific trivial names) were (as is well known) considerably tightened up, with effect from 31st December, 1930 / 1st January, 1931, by the Tenth International Congress of Zoology, Budapest, 1927, by which a new proviso (Proviso (c)) was added to Article 25. Experience showed that this new proviso was in certain respects unduly restrictive in character, and, on the recommendation of the International Commission, the terms of this proviso were relaxed in various ways

by the Thirteenth International Congress of Zoology in Paris in 1948. Neither under the Budapest Proviso nor under the modification of that Proviso, approved by the Paris Congress (see 1950, *Bull. zool. Nomencl.* **4**: 68-71) could a trivial name possessing, as its sole "indication," a qualified (*i.e.*, a doubtful or provisional) synonymization with a previously published trivial name be regarded as having been published with an "indication." Thus, any trivial name published in the foregoing manner *on or after 1st January 1931* is invalid (because it was published without an "indication") and accordingly possesses the status only of a *nomen nudum*. The question of principle upon which an answer is required in the light of Dr. Angus M. Woodbury and Dr. Hobart M. Smith's application is therefore confined to trivial names published *on or before 31st December 1930*.

4. Relevance of Article 31 of the "Règles" to the status of a trivial name published on or before 31st December, 1930, having as its sole "indication" a qualified synonymic reference to a previously published trivial name. It is important at this point to recall that at their meetings held in Paris, in 1948, both the International Commission and the International Congress gave special consideration to Article 31 of the *Règles*, the Article which prescribes the manner in which, on the analogy of Article 30 (which provides means for ascertaining the type species of a genus), the type specimen of a species is to be determined. It was agreed on all hands that the text of Article 31, as it existed at the time of the opening of the Paris Congress, was inadequate and obscure and it was for this reason that great attention was given to the devising of a revised text which would be both comprehensive in scope and clear in meaning. The recommendations agreed upon by the International Commission and which were subsequently approved by the Congress are recorded in the 11th Conclusion of the 4th Meeting of the International Commission during its Paris Session (see 1950, *Bull. zool. Nomencl.* **4**: 73-76). As will be seen by reference to the foregoing Conclusion, the purpose of the amendment of Article 31, so undertaken, was to set out in express terms the provisions relating to the determination of the identity of the taxonomic species represented by a given nominal species previously prescribed only obliquely by reference to the not altogether comparable provisions in Article 30. Under the reformed Article 31 provision is made for the selection, where no one specimen was originally designated or indicated as the holotype, of one of the original specimens (*i.e.*, one of the syntypes) to be the lectotype of the species concerned, or, in certain circumstances, of a figure, illustration or previously published description cited in the original description of the nominal species concerned, to represent the lectotype. Article 31, as so revised, now contains an express provision (as the earlier text included by inference) for the exclusion of specimens, figures, illustrations and descriptions of certain categories from eligibility for selection either to be, or to represent, the lectotype of the species in question (provision analogous to Rule (e) in Article 30). This provision in Article 31 will be found in Conclusion 11 (2) (d) at the top of page 76 in vol. 4 of the *Bulletin*. This provision expressly excludes from eligibility for selection (i) to be, or (ii) to represent, the lectotype of a nominal species, a "specimen, illustration, figure, or description" that was "only doubtfully referred to the nominal species by its original author."

5. *A trivial name published without any descriptive matter, other than a qualified synonymic reference, invalid, because published without an "indication"*: When we apply the provision set forth above to the case of a trivial name published without any descriptive matter other than a qualified synonymic reference, we see at once that there is no means of providing for a nominal species so named a description (or reference) to represent the lectotype of that nominal species, for the sole reference given by the original author was given in a manner which excludes it from eligibility to be selected to represent the lectotype. In other words there is no means by which such a nominal species can be identified, for its name was published without an "indication" and is therefore an invalid *nomen nudum*.

6. *Procedure recommended*: Since (as we have seen) a decision in the form of an interpretative *Declaration* in regard to the status of a trivial name, which, when first published, was accompanied only by a qualified synonymic reference, is expressly asked for in the application by Dr. Angus M. Woodbury and Dr. Hobart M. Smith, it is suggested that, in the light of the considerations set forth in paragraphs 4 and 5 above, the International Commission on Zoological Nomenclature should render a *Declaration* in the terms set out below:—

Suggested "Declaration"

A trivial name published without descriptive matter of any kind, except a qualified (i.e. doubtful or provisional) synonymic reference to an older trivial name that had been validly published with an indication, definition or description, is to be treated as having been published without an "indication" for the purposes of Proviso (a) to Article 25. A trivial name so published is to be treated as a *nomen nudum*, possessing no status in zoological nomenclature.

ON THE PROPOSED SUPPRESSION OF THE TRIVIAL NAME "AJAX" LINNAEUS, 1758 (CLASS INSECTA, ORDER LEPIDOPTERA)

By WILLIAM D. FIELD

(United States National Museum, Washington, D.C., U.S.A.)

(Commission's reference Z.N.(S.)192)

(Memorandum received under cover of a letter dated 30th July, 1951)

After reviewing the problem under discussion (Corbet, 1951, *Bull. zool. Nomencl.* **2**: 26–29), I find my thoughts reduced to four beliefs:—

- (A). It is clear that Linnaeus confused three species under the trivial name *ajax* (*Papilio ajax*): First, the species usually known as *Papilio glaucus* Linnaeus, which is the species described by Ray in the first reference listed by Linnaeus under *ajax* (Raj. ins. 111, n.2).

Second, the species usually known as *Iphiclides marcellus* (Cramer), which is the species illustrated by Edwards in the second reference listed by Linnaeus under *ajax* (Edw. av. 34). Third, the species described in the very brief Linnean description. Although much debate has centred upon what species best fits this brief description, it is undeniable that neither of the above-mentioned species applies to it.

- (B). Although there has been no uniformity in applying the name *ajax*, it has most frequently been applied to the species commonly known as *Papilio polyxenes asterius* Stoll and *Iphiclides marcellus* (Cramer).
- (C). The habitat cited by Linnaeus "Habitat in America boreali" does not necessarily throw light upon the correct application of the name *ajax*, as Linnaeus and other early workers were often led astray by false locality information.
- (D). Corbet has shown that in the Linnean collection there is an undoubted Linnean specimen of the Oriental species generally known as *Papilio xuthus* Linnaeus, 1767, labelled "*ajax*" in Linnaeus' own handwriting. If this were regarded as a holotype (as it seems to be), then the name *ajax* would be transferred to a species not identified with this name for nearly the past 200 years.

Therefore I support the Corbet proposal and consider that it would be better to eliminate the name *Papilio ajax* Linnaeus, 1758, from zoological nomenclature.

**PROPOSED USE OF THE PLENARY POWERS TO
DESIGNATE A LECTOTYPE FOR THE NOMINAL SPECIES
"ASTERIAS QUINQUELOBA" GOLDFUSS, 1831 (CLASS
ASTEROIDEA) IN HARMONY WITH CURRENTLY
ACCEPTED NOMENCLATORIAL PRACTICE**

By C. W. WRIGHT (*London*)

(Commission's reference Z.N.(S.)514)

1. The object of the present application is to invite the International Commission on Zoological Nomenclature to use its plenary powers to designate a lectotype for the nominal species *Asterias quinqueloba* Goldfuss, 1831 (Class Asteroidea), in order to avoid the serious confusion and disturbance in current nomenclatorial practice which would inevitably follow any attempt strictly to apply the normal provisions of the *Règles* in this case. It is hoped that it will be possible for the International Commission to give an early decision on the present application, since that decision is urgently required in connection with the preparation of the relevant portion of the forthcoming *Treatise on*

Invertebrate Paleontology. The details relating to this case are set out in the following paragraphs.

2. The generic name *Metopaster* was published by Sladen in 1893 (in Sladen & Spencer in Wright, 1893, *Brit. foss. Echinod. cret. Formations* **2**(2): 30). Sladen did not designate or indicate a type species for the genus so named, to which he assigned eight nominal species. In practice, the first of these species, *Goniaster (Goniodiscus) parkinsoni* Forbes, 1848 (*Mem. geol. Survey Great Britain* **2**: 472) has been generally regarded by subsequent workers as typifying this genus, but neither it nor any other species was selected under Rule (g) in Article 30, until in 1950 Rasmussen (*Dansk. geol. Unders.* **2** (No. 77): 16) selected this species to be the type species.

3. Spencer in 1913 (*Phil. Trans. Roy. Soc. (B)* **204**: 120) published the generic name *Crateraster*. He assigned two nominal species to the genus so named and one of these, *Asterias quinqueloba* Goldfuss, 1831, he designated as the type species.

4. At the time when the name *Asterias quinqueloba* was first published, Goldfuss (1831, *Petref. German.* **1**: 209 pl. 5) gave under his figure 5 reproductions of a considerable number of individual marginalia. Goldfuss' figures were examined in detail in 1907 by Spencer who came to the conclusion that three species were involved, namely: (1) *Goniaster (Goniodiscus) parkinsoni* Forbes, 1848, to which he assigned sub-figures "a" to "p" of Goldfuss' figure 5; (2) *Oreaster ocellatus* Forbes, 1848, *Mem. geol. Survey Great Britain* **2**: 468, to which he assigned Goldfuss' sub-figures "q" to "r"; (3) *Pentagonaster megaloplax* Sladen, 1891, to which he assigned Goldfuss' sub-figures "s" to "u." These three species were by this time regarded as belonging to three different genera, the first to *Metopaster* Sladen, 1893, the second to *Stauranderaster* Spencer, 1907 (in Sladen & Spencer in Wright, *Brit. foss. Echinod. Cret. Formations* **2**(4): 99, 125) (of which *Oreaster boysi* Forbes, 1848, *Mem. geol. Survey Great Britain* **2**: 468, is the type species, by original designation), the third to *Pentagonaster* Schulze, 1760 (*Verst. Seest.*: 51). At the conclusion of his review Sladen selected Goldfuss' sub-figures "t" and "u" to represent the lectotype of *Asterias quinqueloba* Goldfuss, 1831. The effect of this action was to reduce the trivial name *megaloplax* Sladen to the status of a junior subjective synonym of the trivial name *quinqueloba* Goldfuss, 1831.

5. Unfortunately, in making the foregoing lectotype selection for *Asterias quinqueloba* Goldfuss, Spencer overlooked the fact that on page 209 of his work Goldfuss had added, with reference to sub-figures "s," "t" and "u" included in his figure 5, the words "Assulae marginales specierum affinium," thus indicating that the marginalia so figured were referable not to his *Asterias quinqueloba* but to allied but distinct species. Accordingly, under Rule (e) of Article 30, as applied to specific trivial names by Article 31, the above sub-figures are ineligible for selection to represent the lectotype of *Asterias quinqueloba* Goldfuss, the marginalia so figured not having been referred to this nominal species by Goldfuss when he first published the specific name

Asterias quinqueloba. Thus, Spencer's selection of these marginalia to represent the lectotype of this species is invalid under the *Règles*.

6. Spencer's lectotype selection has been followed by subsequent workers, no one subsequently having made any other such selection. Now that that selection is seen to be invalid, it is necessary to consider what would be the effect of making either of the two selections which alone are possible under Article 31—a provision which, it may usefully be recalled, was greatly clarified by the International Congress of Zoology in 1948 (see 1950, *Bull. zool. Nomencl.* **4**: 73-76). The possible choices are either (1) one of the marginalia figured by Goldfuss as sub-figures "a" to "p," or (2) the marginalia figured by that author as sub-figures "q" and "r." If the first course were to be adopted, the species represented by the nominal species *Asterias quinqueloba* Goldfuss would become subjectively identical with that represented by the nominal species *Goniaster* (*Goniodiscus*) *parkinsoni* Forbes, 1848, while if the second course were to be adopted, Goldfuss' species would become subjectively the same as *Oreaster ocellatus* Forbes, 1848 (now known as *Valettaster ocellatus* (Forbes, 1848)). Thus, at the species level the adoption of the first of these courses would be to make the trivial name *parkinsoni* Forbes, 1848, a junior subjective synonym of the trivial name *quinqueloba* Goldfuss, 1831, while the adoption of the second of these courses would be to make the trivial name *ocellatus* Forbes, 1848, a junior subjective synonym of Goldfuss' *quinqueloba*. In either case, the species which for the last forty-four years has been known as *Crateraster quinqueloba* (Goldfuss, 1831) would be deprived of its accustomed trivial name and would have to bear the trivial name *megaloplax* Sladen, 1891, a name which (as already explained) has been treated as a synonym ever since the publication of Spencer's paper of 1907.

7. The effects of either of the foregoing lectotype selections for *Asterias quinqueloba* Goldfuss would be equally disastrous at the genus level:—

- (1) If the first of the foregoing courses were to be adopted and, in consequence, it were necessary subjectively to identify *Asterias quinqueloba* Goldfuss, 1831 (the type species of *Crateraster* Spencer, 1913) with *Goniaster* (*Goniodiscus*) *parkinsoni* Forbes, 1848 (the type species of *Metopaster* Sladen, 1893), the generic name *Crateraster* Spencer would become a subjective junior synonym of *Metopaster* Sladen.
- (2) If the second of the foregoing courses were to be adopted and, in consequence, it were necessary subjectively to identify *Asterias quinqueloba* Goldfuss, 1831 (the type species of *Crateraster* Spencer, 1913) with *Oreaster ocellatus* Forbes, 1848 the name *Crateraster* Spencer 1913, would become a subjective senior synonym of, and would replace, the name *Valettaster* Lambert, 1914 (*Rév. crit. Paléozool.* **1914**: 27) of which *Oreaster ocellatus* Forbes, 1848, is the type species. (The name *Valettaster* Lambert was published as a nom. nov. pro *Tholaster* Spencer, 1913 (*Phil. Trans. roy. Soc. (B)* **204**: 137), which is invalid, because it is a junior homonym of the

name *Tholaster* Seunes, 1891, *Bull. Soc. géol. France* (3)**19**: 23. The name *Tholasterina* Valette, 1915 (*Bull. Soc. Sci. hist. nat. Yonne* **68**(2): 57), also proposed as a nom. nov. pro *Tholaster* Spencer, 1913, is invalid, being a junior objective synonym of *Valettaster* Lambert, 1914.)

8. It will be seen from the foregoing particulars that whatever lectotype were to be selected for *Asterias quinqueloba* Goldfuss, great confusion would necessarily ensue, for (1) in either case it would be necessary to transfer the trivial name *quinqueloba* Goldfuss from the species which has borne that name for the last forty-four years and to transfer it to a species belonging to a different genus, and (2) it would be necessary either to transfer the name *Metopaster* Sladen from the genus for which it has always been used to the genus known ever since 1913 as *Crateraster* Spencer, or to transfer the name *Crateraster* Spencer from the genus for which it has always been used to the genus known since 1914 as *Valettaster* Lambert. Either of these results would be open to very strong objection, all the more so because the species concerned are among the commonest species of the Cretaceous of North-Western Europe and have frequently been recorded in the literature of the Chalk.

9. For the foregoing reasons the present seems to be a pre-eminently suitable case for the use by the International Commission on Zoological Nomenclature of its plenary powers for the purpose of preventing confusing changes in nomenclature, having regard especially to the fact that the avoidance of transfers of names (either generic names or trivial names) from one taxonomic unit to another is specifically cited among the purposes for which the International Congress of Zoology conferred the plenary powers upon the International Commission (see *Declaration* 5, published in 1943, *Opinions and Declarations rendered by the International Commission on Zoological Nomenclature* **1**: 31-40).

10. I accordingly request the International Commission on Zoological Nomenclature:—

- (1) to use its plenary powers (a) to set aside all selections of lectotypes for the nominal species *Asterias quinqueloba* Goldfuss, 1831, made prior to the decision now proposed to be taken, and (b) to designate sub-figures "t" and "u" of figure 5 on plate 63 in volume 1 of Goldfuss (G. A.), *Petrefacta Germaniae* to represent the lectotype of the foregoing nominal species;
- (2) to place the under-mentioned generic names on the *Official List of Generic Names in Zoology*:—
 - (a) *Crateraster* Spencer, 1913 (type species, by original designation: *Asterias quinqueloba* Goldfuss, 1831, as proposed, under (1)(b) above, to be defined under the plenary powers) (gender of generic name: masculine)
 - (b) *Metopaster* Sladen, 1893 (type species, by selection by Rasmussen, 1950: *Goniaster* (*Goniodiscus*) *parkinsoni* Forbes, 1848) (gender of generic name: masculine)

- (c) *Stauranderaster* Spencer, 1907 (type species, by original designation : *Oreaster boysi* Forbes, 1848) (gender of generic name : masculine)
- (d) *Valettaster* Lambert, 1914 (type species, by selection, by Rasmussen, 1950 : *Oreaster ocellatus* Forbes, 1848) (gender of generic name : masculine) ;
- (3) to place the under-mentioned generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—
 - (a) *Tholaster* Spencer, 1913 (a junior homonym of *Tholaster* Seunes, 1891)
 - (b) *Tholasterina* Valette, 1915 (a junior objective synonym of *Valettaster* Lambert, 1914) ;
- (4) to place the under-mentioned trivial names on the *Official List of Specific Trivial Names in Zoology* :—
 - (a) *boysi* Forbes, 1848 (as published in the binominal combination *Oreaster boysi*) (trivial name of type species of *Stauranderaster* Spencer, 1907)
 - (b) *ocellatus* Forbes, 1848 (as published in the binominal combination *Oreaster ocellatus*) (trivial name of type species of *Valettaster* Lambert, 1914)
 - (c) *parkinsoni* Forbes, 1848 (as published in the combination *Goniaster* (*Goniodiscus*) *parkinsoni*) (trivial name of type species of *Metopaster* Sladen, 1893)
 - (d) *quinteloba* Goldfuss, 1831 (as published in the binominal combination *Asterias quinteloba*), as proposed, under (1)(b) above, to be defined under the plenary powers (trivial name of type species of *Crateraster* Spencer, 1913).

**PROPOSED USE OF THE PLENARY POWERS TO
VALIDATE THE GENERIC NAME "HOPLITES" NEUMAYR,
1875 (CLASS CEPHALOPODA, ORDER AMMONOIDEA)
AND TO DESIGNATE A TYPE SPECIES FOR THIS NOMINAL
GENUS IN HARMONY WITH CURRENT NOMENCLATORIAL
USAGE**

By C. W. WRIGHT (*London*)

(Commission's reference Z.N.(S.)533)

The object of the present application is to ask the International Commission on Zoological Nomenclature to use its plenary powers, first, to validate

the well-known generic name *Hoplites* Neumayr, 1875 (Class Cephalopoda, Order Ammonoidea), and, second, to designate a type species for this genus in harmony with current nomenclatorial usage. It is hoped that it will be possible for the International Commission to reach an early decision on these questions, as such a decision is urgently required in connection with the preparation of the forthcoming international *Treatise on Invertebrate Paleontology*. The facts relating to this case are set out in the following paragraphs.

2. The generic name *Hoplites* Neumayr, 1875 (*Sitzber. Akad. Wiss. Wien* (math. nat. Kl.) **71** (No. 1) : 681) was established for a large number of species of ammonites, ranging from Kimmeridgian PERISPINCTIDAE to Campanian PLACENTICERATIDAE. Since the publication of the name *Hoplites* by Neumayr in 1875, separate names have been given by various authors to most of the distinguishable groups included by Neumayr in this genus, and for the last half century the name *Hoplites* Neumayr has been used solely or primarily for the Albian "dentati." The accepted current interpretation of this nominal genus is that by Spath, 1925 (*Ammonoidea of the Gault*, London, (*Pal. Soc. Monogr.*, 1922) **1** : 79).

3. Among the species of various ages included by Neumayr in his genus *Hoplites*, was *Ammonites interrupta* Bruguière, 1789 (*Ency. méth.* (Vers) (1) : 41) which was regarded as representative of the Albian group of the "dentati," a nominal species which can be clearly interpreted from the figures given by d'Orbigny in 1841 (*Pal. franç.*, Terr. cré. **1** : 211, pls. 31, 32) which were labelled "*interruptus*." As already explained, the nominal genus *Hoplites* Neumayr has always been regarded as being typified by the foregoing taxonomic group, which throughout most of the nineteenth century was identified with *Ammonites interrupta* Bruguière. In 1897, however, Parna & Bonarelli (*Pal. ital.* **2** : 91) demonstrated that Bruguière's nominal species *Ammonites interrupta* represents a Jurassic Parkinsoniid and not one of the Albian "dentati." This conclusion was later confirmed by Jacob in 1907 (*Trav. Lab. Geol. Grenoble* **8**(2) : 361) and by Spath in 1925 (: 80). The genus *Hoplites* Neumayr, 1875, as hitherto understood, rests, therefore, upon a misidentification.

4. The interpretation of *Ammonites interrupta* Bruguière by d'Orbigny in 1841 to which reference has already been made itself included what are now regarded as being several distinct species of the "dentati." Among these was the species represented by the nominal species *Ammonites dentatus* Sowerby (J.), 1821 (*Min. Conch.* **4** : 3. pl. 308), although none of the figures given by d'Orbigny represents that species as now restricted in the sense specified by Spath in 1925 (: 101-105).

5. Jacob in 1907 (*loc. cit.* : 369) selected *Ammonites dentatus* Sowerby, 1821, to be the type species of the nominal genus *Hoplites* Neumayr, 1875. This selection has since been generally accepted (see Spath, 1925 : 100) by whom the species was interpreted in the sense indicated above ; Roman, 1938, *Amm. jur. cré.* : 364). Under the *Règles*, Spath's selection of this species as the type species of *Hoplites* Neumayr is invalid, for the nominal species *Ammonites dentatus* Sowerby, 1821, was not one of the nominal species originally included

in this genus by Neumayr. That selection is however consistent with Neumayr's conception of his genus, so far as it is now possible to make out what that was.

6. The difficulties which have arisen in regard to the name *Hoplites* Neumayr, 1875, are not confined, however, to doubts regarding its type species, for, in addition, this generic name is invalid as a junior homonym, the name *Hoplites* having been applied to no less than six other nominal genera, before it was published by Neumayr for the genus of ammonites under consideration. These nominal genera are :—

- (1) *Hoplites* Dejean, 1833 (*Cat. Coléopt.* (ed. 2) : 150).
- (2) *Hoplites* Agassiz, 1846 (*Nomencl. zool. Lep.* : 36) (an emendation of the name *Hoplitis* Hübner [1819], *Verz. bekannt. Schmett.* (10) : 147);
- (3) *Hoplites* Agassiz, 1848 (*Nomencl. zool. Index univ.* : 554) (an emendation of the name *Aplites* Rafinesque, 1820, *Western Review* 2(1) : 50);
- (4) *Hoplites* Philippi, 1857 (*Arch. Naturgesch.* 23 (Abt. 1) : 320);
- (5) *Hoplites* Theobald, 1864 (*J. asiat. Soc. Bengal* (Pt. 1) 33 : 244);
- (6) *Hoplites* Koch, 1869 (*Z. Ferd. Tyrol* (3) 14 : 155).

7. Of the foregoing names not one is in use today in the group concerned. *Hoplites* Dejean, 1833, applied to a group of beetles, is a *nomen nudum* (see Neave, 1939, *Nomencl. zool.* 2 : 691). The name *Hoplites* Agassiz, 1846, published as an emendation of *Hoplites* Hübner [1819] (a genus of Lepidoptera) has not been adopted; nor has the corresponding emendation made by Agassiz in 1848 for *Aplites* Rafinesque, 1820, a genus of fishes. The name *Hoplites* Philippi, 1857, applied by its author to a genus of Crustacea, is invalid as a junior homonym of *Hoplites* Agassiz, 1846; Miss I. Gordon (British Museum (Natural History)), whom I have consulted, has kindly informed me that the animal placed in this genus by Philippi is the larval form of a species belonging to a genus of Pentida, probably *Gennadas* Bate, 1881 (*Ann. Mag. nat. Hist.* (5) 8 : 191). The name *Hoplites* Theobald, 1864, applied by its author to a genus of slugs, is invalid as a junior homonym of *Hoplites* Agassiz, 1846. The nominal genus so named (as has been pointed out to me by Dr. L. R. Cox, F.R.S., of the British Museum (Natural History)) is treated by Theile (J.), 1931 (*Handb. syst. Weichtierkunde* 1 : 641) as identical with the nominal genus *Girasia* Gray, 1855 (*Cat. Pulmonata Coll. Brit. Mus.* : 51, 61), of which name Theile therefore treats *Hoplites* Theobald as a junior synonym. Finally, the name *Hoplites* Koch, 1869, which, like the two names discussed immediately above, is an invalid junior homonym of *Hoplites* Agassiz, 1846, has been replaced on this account by the name *Astrobunus* Thorell, 1876 (*Ann. Mus. Stor. nat. Genova* 8 : 466, 499).

8. In spite of the existence of the names listed above, the name *Hoplites* Neumayr, 1875, was never challenged on the ground that it was an invalid junior homonym until 1947, when this view was put forward by Breistoffer (*Trav. Lab. Géol. Grenoble* 26 : 84), who considered that on this account the name *Hoplites* Neumayr, 1875, should be rejected. He accordingly published the new generic name *Odonthoplites* (: 84), designating *Hoplites canavari*

Parona & Bonarelli, 1896, as its type species. Breistoffer called his new subgenus *Odonthoplites* a *nom. nov.* for *Hoplites* Neumayr, although, as will be seen, he designated a different species as its type species, thus in fact making the two genera (or subgenera) only subjectively identical with one another as the type species of the nominal genus so named are not the same. Breistoffer treated *Odonthoplites* Breistoffer as a subgenus of *Euhoplites* Spath, 1925 (*Ammonoidea Gault (Pal. Soc. Monogr., 1922) (2): 82*). At the same time he applied the new name ANAHOPLITIDAE to the family hitherto universally known as HOPLITIDAE. The result is great confusion in the nomenclature of this group of ammonites.

9. The position is therefore that none of the genera to which the name *Hoplites* was applied prior to the publication of Neumayr's paper in 1875 now bears that name but that, although an invalid name, the genus *Hoplites* Neumayr is an important genus in ammonites, having given its name not only (as mentioned above) to a family but also to a superfamily. The rejection of this name on the ground of homonymy would serve absolutely no useful purpose, since (as has been shown) none of the earlier names are in use in the groups concerned. Such rejection would, on the other hand, give rise to quite unnecessary confusion and instability in the nomenclature of the group concerned.

10. For the reasons set forth above, I accordingly ask the International Commission on Zoological Nomenclature:—

(1) to use its plenary powers:—

(a) to suppress the under-mentioned generic names for the purposes both of the Law of Priority and for those of the Law of Homonymy:—

- (i) *Hoplites*, as applied to any genus of the Order Coleoptera (Class Insecta) subsequent to the publication of the *nomen nudum* *Hoplites* Dejean, 1833, and prior to the publication of the name *Hoplites* Neumayr, 1875;
- (ii) *Hoplites* Agassiz, 1846 (as published as an emendation of the name *Hoplitis* Hübner [1819];
- (iii) *Hoplites* Agassiz, 1848 (as published as an emendation of *Aplites* Rafinesque, 1820);
- (iv) *Hoplites* Philippi, 1857;
- (v) *Hoplites* Theobald, 1864;
- (vi) *Hoplites* Koch, 1869;

(b) to validate the generic name *Hoplites* Neumayr, 1875;

(c) to set aside all selections of type species for the genus *Hoplites* Neumayr, 1875, made prior to the decision now proposed to be taken, and to designate *Ammonites dentatus* Sowerby (J.), 1821 (as defined by Spath, 1925) to be the type species of the foregoing genus;

- (2) to place the generic name *Hoplites* Neumayr, 1875 (gender of name : masculine) (type species, by designation, as proposed under (1)(c) above, under the plenary powers and as there proposed to be interpreted : *Ammonites dentatus* Sowerby (J.), 1821) on the *Official List of Generic Names in Zoology* ;
- (3) to place the under-mentioned reputed or invalid generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—
 - (a) *Hoplites* Dejean, 1833 (a *nomen nudum*) ;
 - (b) the six generic names proposed, under (1)(a) above, to be suppressed under the plenary powers ;
- (4) to place the trivial name *dentatus* Sowerby (J.), 1821 (as published in the binominal combination *Ammonites dentatus*) (the trivial name of the type species of *Hoplites* Neumayr, 1875) on the *Official List of Specific Trivial Names in Zoology*.

11. Dr. L. F. Spath, F.R.S. (British Museum (Natural History)), whom I have consulted in the course of the preparation of the present application, kindly allows me to state that he is in agreement with the recommendations now submitted.

**ON THE PROPOSAL SUBMITTED BY DR. HELEN MUIR-
WOOD THAT A "DECLARATION" SHOULD BE RENDERED
RULING THAT ANY TWO NAMES DIFFERING FROM
ONE ANOTHER ONLY BY THE PRESENCE IN THE CASE
OF ONE NAME AND THE ABSENCE IN THE OTHER, OF
A DIACRITIC MARK OVER ONE OF THE LETTERS OF
WHICH THE WORD IS COMPOSED, ARE REGARDED AS
HOMONYMS OF ONE ANOTHER**

By C. J. STUBBLEFIELD, D.Sc., F.R.S.

(*Geological Survey and Museum, London*)

(Commission's reference Z.N.(S.)538)

(Letter dated 23rd July, 1951)

I send you herewith a note on the question of the relative status of such generic names as *Törnquistia* and *Tornquistia*, which I have prepared, after reading the application on this subject submitted by Dr. Helen Muir-Wood.¹

1. Whilst agreeing that confusion may arise if a printer omits the diacritic mark from *Törnquistia*, the occasions for this confusion are likely to be few, since the animals whose names are involved belong to different Phyla and characterise strata widely different in age.

2. I recall the example recently quoted by Rud. Richter (1949, *Entom* 1 : 69) where the acoustically identical names *Caninia* Michelin, 1840 (in Gervais

¹See pp. 92-94.

Dict. Sci. nat., Suppl. **1** : 485) and *Kaninia* Walcott & Resser, 1928 (*Rep. sci. Res. Norw. Exped. Novaya Zemlya* **2** : 6), are nomenclatorially permissible, since they do not comply with clause (1) in *Opinion* 147 in being homonyms, for the first takes origin from *canis* (a dog) and the second from a place name. It seems clear that *Törnquistia* and *Tornquistia* not only take origin from different sources but are also acoustically different; I suggest that, before reaching a decision to make these names homonyms, it would be well to take opinions from relevant nationals, whose languages carry letters with diacritic marks.

3. If *Törnquistia* and *Tornquistia* are both held to be nomenclatorially available, it should however be borne in mind that at some future date each of these generic names is potentially the base of a family name; the names so formed would be TÖRNQUISTIDAE and TORNQUISTIDAE. A state of affairs such as already exists for the two families HARPIDAE and for the two other families named SCUTELLIDAE would then be approached, though in the present instance it would be a case of resemblance, not of identity in name. The case of the names HARPIDAE and SCUTELLIDAE is so confusing as to be undesirable, and as such is already under consideration by the International Commission (reference Z.N.(S.)357).

ON THE STATUS FOR THE PURPOSES OF ZOOLOGICAL NOMENCLATURE OF THE WORK ENTITLED "THE NATURAL HISTORY OF CORNWALL" BY WILLIAM BORLASE PUBLISHED IN 1758, WITH SPECIAL REFERENCE TO THE AVAILABILITY OF THE GENERIC NAME "ASTACUS" BORLASE, 1758 (CLASS CRUSTACEA, ORDER DECAPODA)

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

(Commission's reference Z.N.(S.)543)

1. When during the late war (in 1944) I was engaged in checking the entries made in the *Official List of Generic Names in Zoology* with a view to its eventual publication in book form (in accordance with the decision announced in 1943 (*Bull. zool. Nomencl.* **1** : xxii-xxiv), I found, when I came to examine the entries in the *Official List* made in the Commission's *Opinion* 104 (1928, *Smithson. misc. Coll.* **73** (No. 5) : 27) that there was a doubt as to the availability under the *Règles*, of the generic name *Astacus* Pallas, 1772 (*Spicil. zool.* **9** : 81) placed on the *Official List* under that *Opinion*.

2. The doubt in regard to the availability of the name *Astacus* as from Pallas, 1772 arose from the fact that on three occasions prior to the publication of volume 9 of the *Spicilegia zoologica* of Pallas, the name *Astacus* had been used—

or was alleged to have been used—as a generic name by other authors. These three earlier uses of the name *Astacus* were the following:—

- (1) *Astacus* Borlase, 1758, *Nat. Hist. Cornwall* : 274.
- (2) *Astacus* Gronovius, 1762, *Acta Helv.* **5** : 365 (not vol. 4, published in 1760, as frequently stated);
- (3) *Astacus* Gronovius, 1764, *Zoophylac. gronov.* : 227.

3. Of the foregoing works, the *Zoophylacium gronovianum* of 1764, was a non-binominal work which in *Opinion* 20 (1910, *Smithson. Publ.* **1938** : 48-50) the International Commission had ruled as a “binary” work. The (in 1944) still unsettled controversy as to the validity of the ruling in regard to the status of generic names published by authors, who, though non-binominal, were allegedly “binary” would thus have complicated the issue of the availability of the name *Astacus* Pallas, 1772, through the competition of the earlier name *Astacus* Gronovius, 1764, if it had not been for the fact that, without prejudice to the validity of its decision in *Opinion* 20, the Commission in *Opinion* 89 (1925, *Smithson. misc. Coll.* **73** (No. 3) : 27-33) had used its plenary powers to suppress the *Zoophylacium gronovianum* for nomenclatorial purposes. Thus, already by 1944, the name *Astacus* Gronovius, 1764, was seen to be invalid.

4. The unsettled question of “binary” versus “binominal” nomenclature did however arise in connection with the name *Astacus* as published by Gronovius in 1762 (see paragraph 2 (2) above), for Gronovius was never a binominalist and the sole claim that could be advanced in favour of the name *Astacus* Gronovius, 1762, being accepted as an available name is that it was published by a “binary”, though not binominal, author. Dr. Karl Jordan, then President of the International Commission, kindly examined this article by Gronovius and reported (*in litt.* 20th January 1944): “The nomenclature of this publication of Gronow’s on the animals of Belgium is of the pre-Linnaean type: generic names generally as the first word of a description; no trivial names, except occasionally in the literature cited, but names given in the Flemish vernacular. Six species of *Astacus* are described, Nos. 450 to 455. The paper is written in Latin.” In 1944, therefore, it was only possible to note that the question of the availability of the name *Astacus* Pallas, 1772, in relation to the name *Astacus* Gronovius, 1762, was one which must await decision, until at the next (Thirteenth) International Congress of Zoology a final ruling was given on the question of the meaning of the expression “nomenclature binaire” under the procedure laid down by the Twelfth International Congress of Zoology, Lisbon, 1935 (see 1943, *Bull. zool. Nomencl.* **1** : 45, 55). In Paris in 1948 the Thirteenth International Congress of Zoology accepted the conclusion unanimously reached by the International Commission that the expression “nomenclature binaire” possessed, and, as used in the *Règles*, always had possessed a meaning identical with that of the expression “nomenclature binominale” and decided to substitute the latter expression for the expression “nomenclature binaire”, wherever that expression had till then appeared in the *Règles* (see 1950, *Bull. zool. Nomencl.* **4** : 63-66). The effect of this decision is to show that the name *Astacus* Gronovius, 1762, possesses no rights under the Law of Priority.

5. In the light of the foregoing decision, the only possible competitor of the name *Astacus* Pallas, 1772, is the name *Astacus* Borlase, 1758. During the war it was not possible for me to examine a copy of Borlase's *Natural History of Cornwall*, and, from this point of view also, the status of the name *Astacus* Pallas, 1772, had then to be left in doubt. I have now had an opportunity of examining the copy of Borlase's book in the library of the Zoological Society of London, and have prepared the following Report :—

The Natural History of Cornwall by William Borlase, [1695-1772], was published at Oxford in 1758. Neither the title page nor the preface contains any information throwing light upon the exact date of publication in that year. The book is a small folio (pp. xix, 326, 28 pls., 1 map).

2. Although the title implies that the subject matter of this book is the natural history of the county of Cornwall, a considerable part of it is concerned either with matters of antiquarian interest or a description of the mineral wealth of the county. The remainder consists of a discursive account of the animals and plants recorded as having been observed in the county or on its shores or in its neighbouring waters. The arrangement of the book is in no sense systematic. The species mentioned are referred to usually under their vernacular English names ; after these there are usually added the Latin names used for those species by some established author. The type of nomenclature employed in this book may be judged by the following quotations taken from page 264, relating respectively to the porpoise and the dolphin :—

- (1) "The porpesse [sic] *Porcus marinus* seu *Phocaena* vel *Tursio* ; *Delphinus corpore fere coniformi, dorso lato, rostro subacuto* Artedi."
- (2) "The Dolphin, the *Delphinus* of the ancients and moderns (Ray, p. 12). *Delphinus corpore oblongo subtereti, rostro longo, acuto* of Artedi, p. 105".

3. The foregoing examples show at once that no attempt was made in this book to apply the principles of binominal nomenclature instituted by Linnaeus in 1758. There is, indeed, so far as I can see, no reference at all to Linnaeus throughout the book. Certainly, there is no reference to the system of binominal nomenclature inaugurated in the 10th edition of the *Systema Naturae*. The total absence of any reference to that work makes it virtually certain either that Borlase's *Natural History* was published before the 10th edition of Linnaeus' great work or that, if the latter was the first to have been published, its existence was unknown to Borlase, who, it may incidentally be noted, complained in his preface of the isolation of Cornwall at that time from the general world of learning.

4. It is perfectly clear from the evidence summarised above that in his *Natural History of Cornwall* Borlase did not apply the principles of binominal nomenclature, of the existence of which, as enunciated by Linnaeus in the 10th edition of the *Systema Naturae* published in the same year, he was indeed probably unaware.

5. As regards the name *Astacus*, the alleged use of which by Borlase led to the present inquiry, it may be noted that this occurs only once—on page 274—where it was used parenthetically in the expression "the lobster, or *Astacus verus*". No description was given either of the genus or the species. Accordingly, since it has been ruled in *Opinion* 1 (1910, *Smithson. Publ.* 1938 : 5) in a provision that it was decided by the Thirteenth International Congress of

Zoology (1950, *Bull. zool. Nomencl.* **4**: 148-149) to incorporate in the *Règles*, that the citation of a vernacular name (such as "the lobster") does not constitute an "indication" for the purposes of Proviso (a) to Article 25, both the generic name *Astacus* and the specific name *Astacus verus*, as published by Borlase in 1758, would have been *nomina nuda*, even if (contrary to what we have seen to be the case) new names in Borlase's *Natural History of Cornwall* had satisfied the requirements of Proviso (b) to Article 25.

6. Old books of doubtful nomenclatorial standing, such as Borlase's *Natural History of Cornwall*, constitute a perpetual menace to stability in nomenclature and it is extremely desirable that the status of such books should be clarified as rapidly as possible. In the present case, it is essential that there should be such a clarification, in order that the doubts in regard to the availability of the name *Astacus* Pallas, placed on the *Official List* in *Opinion* 104 should be dispelled with as little further delay as possible. In the light of the foregoing Report it is recommended that the International Commission should now issue a ruling that Borlase's book is not an available book for nomenclatorial purposes. In order further to clarify the position as regards the availability of the generic name *Astacus* Pallas, 1772, it is suggested that the older, but invalid, uses of this generic name should be disposed of by their being placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*. The specific recommendations now submitted to the International Commission on Zoological Nomenclature are therefore that it should :—

- (1) rule that in the work entitled *The Natural History of Cornwall*, published in 1758, William Borlase did not apply the principles of binominal nomenclature and therefore that new names published in that work do not satisfy the requirements of Proviso (b) to Article 25 of the *Règles*, and accordingly possess no rights under the Law of Priority in virtue of having been so published ;
- (2) place the under-mentioned generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—
 - (a) *Astacus* Borlase, 1758 (a name published in a book in which the author did not apply the principles of binominal nomenclature) ;
 - (b) *Astacus* Gronovius, 1762 (a name published in a paper in which the author did not apply the principles of binominal nomenclature) ;
 - (c) *Astacus* Gronovius, 1764 (a name published in a book in which the author did not apply the principles of binominal nomenclature).

SUPPORT FOR THE PROPOSAL SUBMITTED BY MR. FRANCIS HEMMING THAT A RULING SHOULD BE GIVEN THAT THE WORK ENTITLED "THE NATURAL HISTORY OF CORNWALL" BY WILLIAM BORLASE, PUBLISHED IN 1758, DOES NOT SATISFY THE REQUIREMENTS OF ARTICLE 25 OF THE "RÈGLES"

By L. B. HOLTHUIS

(*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*)

(Commission's reference Z.N.(S.)543)

(Letter dated 13th June, 1951)

W. Borlase's (1758) "The Natural History of Cornwall" has been considered by various carcinologists (among whom K. H. Barnard, 1950, in his important and recent monograph of the South African Decapoda *Ann. S. Afr. Mus.* **38**: 525, 526) to constitute the first publication in which the generic name *Astacus* has been validly employed. These carcinologists therefore are of the opinion that *Astacus verus* Borlase, 1758 (= *Cancer gammarus* Linnaeus, 1758) should be the type species by monotypy of the genus *Astacus*. This, of course, is contrary to *Opinion* 104 of the International Commission on Zoological Nomenclature, in which *Cancer astacus* Linnaeus is specified as the type species of the genus *Astacus*. The fact that Borlase's book is rare and therefore not accessible to most carcinologists, made it extremely hard for most workers in this group to form a correct opinion on this case. It is very fortunate therefore that, through Mr. Hemming's careful examination of Borlase's work and his conclusion that it contains no valid names, the question at last has been settled. Since the majority of carcinologists did not accept Borlase's name *Astacus*, the stability of carcinological nomenclature will be furthered by the suppression of the book in question.

ON THE QUESTION WHETHER IT IS DESIRABLE THAT WORDS SHOULD BE ADDED TO THE "RÈGLES" EXPRESSLY PROVIDING THAT FOR THE PURPOSES OF ESTABLISHING A CONDITION OF SECONDARY HOMONYMY BETWEEN TWO SPECIFIC NAMES IT IS NOT NECESSARY THAT AN AUTHOR SHOULD EXPRESSLY CITE THE NAMES IN HOMONYMOUS COMBINATIONS BEFORE REJECTING AND REPLACING THE LATER PUBLISHED OF THE TWO TRIVIAL NAMES INVOLVED

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

(Commission's reference Z.N.(S.)586)

1. In an application (Z.N.(S.)188) relating to the question of the correct trivial name of the Kidney Worm of Swine (1951, *Bull. zool. Nomencl.* **2**: 282-291), Dr. Ellsworth C. Dougherty alludes to, and rejects, the argument which, prior to the revision of the provisions (Articles 35 and 36) of the *Règles* relating to specific homonymy, was sometimes advanced to the effect that, in order to establish a condition of secondary homonymy, it is not sufficient that an author should place in a single genus two species, each having the same word as its trivial name, and should reject and replace the later published of the two trivial names in question. According to the argument referred to by Dr. Dougherty, it is—or should be—necessary for such an author actually to apply to each of the two species concerned the same homonymous specific name (combination of generic name and specific trivial name) as a preliminary to the rejection of the later published trivial name on grounds of secondary homonymy and to its replacement by some other trivial name applicable, either objectively or subjectively, to the species bearing the invalid trivial name so rejected. It will be appreciated that the object of the argument described above is to provide a justification for the revival of a trivial name that formed part of a specific name which had at one time been rejected as a secondary homonym, in cases where (as has almost invariably been the case) the author rejecting the trivial name in question did not, in so doing, apply the special procedure described above. In other words, the object of this argument is to provide a legal means for avoiding giving effect to the provision that a name, once rejected on grounds of homonymy, is to be regarded as having been permanently so rejected and accordingly as incapable of being brought back into use by any later author who may himself hold the taxonomic (and therefore subjective) view that the two species concerned are not congeneric with one another.

2. In a supplementary note to Dr. Dougherty's application (1950, *Bull. zool. Nomencl.* **2**: 291-293) I appealed to interested specialists to inform the International Commission on Zoological Nomenclature whether, in their opinion, the replacement of the trivial name *dentatus* Diesing, 1839) by the

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trivial name *pinguicola* Verrill, 1870, as the trivial name of the Kidney Worm of Swine would be likely to give rise to confusion, and, in doing so, I commented (: 292) on the contention regarding the Law of Homonymy as applied to secondary homonyms set out above. I recalled that, when at Paris in 1948 the Law of Homonymy was subjected to careful and prolonged consideration (1950, *Bull. zool. Nomencl.* **4** : 97-105, 107-125) no voice was raised in favour of the incorporation in Articles 35 and 36 of a special limiting provision of the kind referred to above. As I there pointed out: "Not only was no such argument advanced, but, on the contrary, the view was strongly expressed that great care must be taken in the revision of Article 35 to avoid the inclusion of formal provisions of a 'ritualistic' character of the kind which (as had previously been pointed out by Dr. J. Brookes Knight (Smithsonian Institution, Washington, D.C.)) had marred the amendment to Article 25 made by the Tenth International Congress of Zoology at Budapest in 1927). For this reason therefore it was expressly agreed that no definition of the procedure to be adopted by an author in rejecting one name as a secondary homonym of another should be inserted in the new rule."

3. In my view, the criticism of the Budapest amendment of Article 25 advanced by Dr. Brookes Knight is well founded and the Paris Congress (and the International Commission as its adviser) took the only right decision in insisting upon the omission from the revised version of the Law of Homonymy of "ritualistic" provisions. In the particular case under consideration the insertion of a provision such as that discussed in paragraph 1 of the present note would not only have complicated and rendered less effective the provisions relating to secondary homonymy as regards all future cases but also, as regards rejections of names as secondary homonyms made prior to the introduction of the new rules, would have rendered virtually inoperative the provision which occupies the central position in Article 36 (as also in the Paris revision), namely that a name once rejected as a homonym is to be permanently rejected and therefore to be incapable of being brought back into use at some later date by specialists who take a different view as to the generic relationship to one another of the two species concerned, from the view on this subject taken by the author rejecting the name of one of those species as a secondary homonym of the name of the other. It is evident therefore that, so long as it is the general wish of zoologists to maintain in the *Règles* the foregoing cardinal principle, it would be entirely inappropriate to include in the *Règles* a provision of the kind described in paragraph 1 above, for such a provision would be open to strong objection both on general grounds because of its "ritualistic" character but also on the specific ground that it would largely stultify the provision that a rejected homonym is never to be brought back into use, by very greatly restricting the number of cases where, for the purposes of the *Règles*, as contrasted with actual fact, one name had been rejected as a secondary homonym of another.

4. In général, it is, as is well known, a sign of bad drafting for a code, in addition to including provisions defining how a given condition or process (in this instance, the condition of secondary homonymy and the process of rejecting secondary homonyms) is to be recognised or effected, to include also provisions specifying one or more conditions or processes which do not comply

with the substantive provision laid down. In the case of the rules of zoological nomenclature, such considerations may perhaps be of less force than in cases where any question of interpretation which may arise is subjected to expert scrutiny by persons trained in interpretative technique, whereas the object of the *Règles* must be to provide clear guidance to persons whose special expertise lies in other fields. For this reason it may be felt that, notwithstanding the general objection to which negative, as contrasted with positive, provisions must always be open, it would be to the general convenience that the International Commission on Zoological Nomenclature should render a "Declaration" stating that: "For the purposes of the provision relating to the rejection of secondary homonyms, an author rejecting one name as a secondary homonym of another name is required to make it clear that he considers that the species bearing the trivial name so rejected is congeneric with another species bearing a previously published identical trivial name but is free to indicate his view on this subject in whatever way he may consider appropriate, provided that the method so adopted leaves no reasonable doubt that he considers the two species concerned to be congeneric with one another."

5. It would be of assistance to the International Commission on Zoological Nomenclature if any specialist interested in the problems raised by the Law of Homonymy would be so good as to send to the Secretary to the Commission (address: 28 Park Village East, Regent's Park, N.W.1, London, England) a statement of his views on the issue raised in the present note for consideration by the International Commission.

ON THE NOMENCLATORIAL STATUS OF NAMES PUBLISHED IN 1777 IN THE "INTRODUCTIO AD HISTORIAM NATURALEM" OF GIOVANNI ANTONIO SCOPOLI

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

(Commission's reference Z.N.(S.)587)

1. At its Session held in Lisbon in September 1935 (Lisbon Session, 4th Meeting Conclusion 11) the International Commission on Zoological Nomenclature had under consideration an application submitted by Dr. B. G. Chitwood (Bureau of Animal Industry, U.S. Department of Agriculture, Washington, D.C.) jointly with four other specialists (all of the U.S. Department of Agriculture), the central feature of this application being the question whether the generic name *Anguina* Scopoli, 1777, published in the foregoing work, was or was not an available name. The point at issue was whether in the *Introductio* Scopoli had applied the "principes de la nomenclature binaire," as then required by Article 25 of the *Règles*. At that time the meaning to be attached to the foregoing expression was the subject of keen debate, some authors claiming that it was identical in meaning with the expression "nomenclature binominale," others that it had a wider meaning. Pending a decision by the International Congress of Zoology on the question of principle involved, all that it was possible for the Commission to do in regard to the application

submitted by Dr. Chitwood and his colleagues was to rule that "for so long as names published by authors using a binary, though not binominal system of nomenclature were recognised as complying with the requirements of Article 25 of the International Code, the generic names published in . . . the *Introductio* . . . should be accepted as available nomenclatorially, but that the position should be re-examined if later it were decided to reject generic names published by authors not applying the binominal system" (1943, *Bull. zool. Nomencl.* **1**: 37-38). In 1943 the foregoing decision was formally embodied in an *Opinion* (*Opinion* 160) which was published two years later (1945, *Opin. Decl. int. Comm. zool. Nomencl.* **2**: 291-306).

2. The next event bearing on the present problem occurred in 1943 when the late Mr. R. Winckworth submitted an application to the International Commission on Zoological Nomenclature, asking for a ruling on the question whether the work by Martin Thrane Brünnich entitled *Zoologiae Fundamenta*, then believed to have been published in 1772 (but later found to have been published in 1771), satisfied the requirements of Proviso (b) to Article 25 of the *Règles*. Mr. Winckworth pointed out in his application that Brünnich's *Fundamenta* was (as its title indicated) an introduction to zoology, that it dealt with taxonomic categories down to, and including, the genus level, but out of considerations of time and space did not attempt to list the species referable to the genera recognised ("Enumeratio specierum nimis foret prolixa."). The only point raised was whether the failure by an author to deal with species, brought his work outside the scope of Proviso (b) to Article 25 (the proviso which then made the availability of a name depend upon the application by its author of the "principes de la nomenclature binaire"); for there was nothing to suggest that, if Brünnich's *Fundamenta* had been designed to deal with species as well as higher taxonomic categories, he would not have applied the principles of binominal nomenclature. It was immediately evident that the problem presented by Brünnich's *Fundamenta* was identical with that raised by Scopoli's *Introductio*, for each of these works was a general textbook of (or introduction to) zoology and in each the author dealt with the various taxonomic categories down to the species level but no further, Brünnich citing no species, Scopoli only occasionally citing species, employing when he cited a specific name, otherwise than in a quotation, a strictly binominal system of nomenclature.

3. At its Session held in Paris the International Commission on Zoological Nomenclature (1950, *Bull. zool. Nomencl.* **4**: 63-66) proposed, and the Thirteenth International Congress of Zoology agreed, that the expression "nomenclature binaire" as hitherto used in the *Règles* had the same meaning as the expression "nomenclature binominale" and substituted the latter expression for the former, wherever it had till then occurred in the *Règles* (i.e. in Articles 25 and 26). This decision cleared up one of the questions which were doubtful at the time when the International Commission rendered its *Opinion* 160 (in regard to the name *Anguina* Scopoli, 1777). As we have seen however (paragraph 2) a decision on this question of principle was not itself sufficient to provide an answer to the problem raised by Scopoli's *Introductio* of 1777 and by Brünnich's *Fundamenta*, for that problem was not whether Scopoli and

Brünnich were binominal authors—there was never any doubt on that score—but whether a binominal author should be held to have complied with the requirements of Proviso (b) to Article 25, i.e. whether he was to be regarded as having “appliqué les principes de la nomenclature binominale” (formerly “binaire”) if in the work in question he dealt with zoological systematic categories, down to, but not including, the species level.

4. At its Paris Session also, the International Commission dealt with the application submitted by the late Mr. Winckworth in regard to the status of new names as published in Brünnich's *Fundamenta* of 1771 (Paris Session, 12th Meeting, Conclusion 2). In accordance with the principle laid down at Lisbon in 1935 (1943, *Bull. zool. Nomencl.* 1: 40) the International Commission decided first the question of principle involved and, having done so, applied the decision so reached to the particular case of Brünnich's *Fundamenta*. On the question of principle, the International Commission agreed (1950, *Bull. zool. Nomencl.* 4: 309) “that, where, prior to 1st January, 1931, an author had published a new generic name in a work dealing with classification down to the generic level but no further, it was not necessary for the purpose of Proviso (b) to Article 25 that in the work concerned the author in question should have cited trivial names of species under that genus or other genera discussed in the book concerned, provided that it was evident that the author concerned would have applied the principles of binominal nomenclature for species if in the book concerned he had dealt with taxonomic units below the genus level.” In the light of the foregoing decision the International Commission agreed (1950, *ibid* 4: 309-310) “to render an *Opinion* stating that, for the reasons given above, the generic names published in Brünnich, 1771, *Zoologiae Fundamenta* complied with the requirements of Article 25 of the *Règles*.”

5. The decision taken by the International Commission in regard to the status of new generic names in Brünnich's *Fundamenta* provides a clear guide for settling the problem of the availability of new generic names in Scopoli's *Introductio* of 1777, for the features presented by that work are indistinguishable from those presented by Brünnich's *Fundamenta*. The stage has therefore now been reached when the Commission is in a position, in accordance with its announced intention, to complete the consideration of the questions raised, but (at that time, unavoidably) left unanswered in its *Opinion* 160 regarding the name *Anguina* Scopoli, 1777, and associated problems. It is accordingly recommended that, in pursuance of the decision on procedure announced in *Opinion* 160 and in the light of the decision of principle taken at the time when the status of the names in Brünnich's *Fundamenta* was settled, the International Commission on Zoological Nomenclature should now give a ruling that in the *Introductio ad Historiam naturalem* of 1777 Scopoli complied with the requirements of Article 25 and therefore that new names published in the above work, if not homonyms or synonyms of older names, are themselves available names.

6. The need for a decision in regard to this matter is extremely urgent, for over the nomenclature of wide areas of the Animal Kingdom the generic names

first published in 1777 in Scopoli's *Introductio* are in current use, but, pending the completion of *Opinion* 160, are liable to challenge with a consequent risk of confusion and unnecessary name-changing. The nomenclature used in Scopoli's *Introductio* is of direct concern, not merely to specialists in one particular Order (where the specialists concerned are at least aware of the nomenclatorial practice in regard to that book adopted by other specialists in that group), but also to specialists in widely separated groups. It may be found, therefore, that in some groups generic names first published in the *Introductio* are not currently in use, specialists in the groups concerned having proceeded on the assumption that the names in question were not available under Article 25 of the *Règles*. In so far as this may prove to be the case, it would clearly be appropriate to apply the general principle laid down by the International Congress of Zoology (1950, *Bull. zool. Nomencl.* **4** : 65) that special consideration should be given to any cases where, as the result of the decision clarifying the meaning of the expression "nomenclature binaire" then taken, a well-known and well-established name was found to be invalid. It is accordingly recommended that, when taking the decision suggested at the end of paragraph 5 of the present application, the International Commission on Zoological Nomenclature should indicate its willingness to give sympathetic consideration to any application which may be submitted to it for the validation of a well-established generic name now found to be either an objective or subjective junior synonym of a generic name published in 1777 in Scopoli's *Introductio* but not currently in use.

7. A decision on the question now submitted to the International Commission will not finally dispose of the matters left undecided in *Opinion* 160; since for this purpose it will be necessary for the Commission to decide whether the name *Anguina* Scopoli, 1777, is to be placed on the *Official List of Generic Names in Zoology* or whether some other name should be accepted for the genus concerned. The views of specialists in the Nematoda are being sought on this question, which, when sufficient information has been collected, will be submitted to the International Commission for decision.

ON THE QUESTION WHETHER IT IS DESIRABLE THAT THE NAME "ANGUINA" SCOPOLI, 1777 (CLASS NEMATODA) SHOULD BE PLACED ON THE "OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY" IN PREFERENCE TO SUCH NAMES AS "ANGUILLULINA" GERVAIS & BENEDEN, 1859, OR "TYLENCHUS" BASTIAN, 1865 (A CASE POSSIBLY INVOLVING THE USE OF THE PLENARY POWERS): APPEAL TO SPECIALISTS FOR ADVICE

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

(Commission's reference Z.N.(S.)588)

1. At its Session held in Lisbon in 1935 (Lisbon Session, 4th Meeting, Conclusion 11) the International Commission on Zoological Nomenclature had under

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consideration an application submitted by Dr. H. G. Chitwood and other specialists on the staff of the United States Department of Agriculture for the official recognition of the generic name *Anguina* Scopoli, 1777, for the Nematode species then (as the applicants stated) "known as *Tylenchus tritici* (= *Anguillulina tritici*)", together with comments received from various specialists, either for or against the application submitted (1943, *Bull. zool. Nomencl.* **1** : 37-38).

2. The problem so submitted raised two issues, the first, general in character (namely, the meaning to be attached to Proviso (b) to Article 25) and, second, the question of the name which it was desirable should be accepted for the Nematode genus in question. The discussion of this latter question was obscured in the papers then before the Commission by reason of the divergent views expressed not on that issue but on the acceptability under Article 25 of names in Scopoli's *Introductio* of 1777 and therefore on the availability of the name *Anguina* Scopoli, 1777. Accordingly, the International Commission did not feel able at that time to do more than to rule that, pending a decision by the Congress as to the Interpretation of the expression "nomenclature binaire," the name *Anguina* Scopoli, 1777, must be accepted as complying with the requirements of Article 25; the Commission added that "no case had been established" for the use of the plenary powers to validate the name *Tylenchus* Bastian, 1865. These decisions were later embodied in the Commission's *Opinion* 160 (1945, *Op. Decl. int. Comm. zool. Nomencl.* **2** : 291-306). The Commission recognised that the foregoing decisions were both incomplete and provisional in character and expressly placed on record its view that it would be necessary to review the position if later the Congress were to reject the then current ruling (i.e. the ruling in *Opinion* 20) regarding the availability of names published by authors who adopted a so-called "binary" but not a binominal system of nomenclature.

3. At its meeting held in Paris in 1948 the International Congress of Zoology approved a proposal that the expression "nomenclature binominale" should be substituted for the expression "nomenclature binaire" in Article 25 (1950, *Bull. zool. Nomencl.* **4** : 63-66), thereby eliminating one of the factors which at Lisbon had made it impossible to reach a final conclusion in regard to the status of the name *Anguina* Scopoli. At the same time the International Commission gave a ruling (1950, *Bull. zool. Nomencl.* **4** : 309-310) that the names published in Brünnich's *Zoologiae Fundamenta* of 1771 (a work indistinguishable in character from Scopoli's *Introductio* of 1777, both being books concerned with zoological classification down to, but not including, the species level) are available names. In the same Session the International Commission put on record its intention of completing previously rendered *Opinions* where those *Opinions* did not cover the whole field involved (1950, *Bull. zool. Nomencl.* **4** : 355). Finally, the Congress directed the Commission in future to place on the *Official List of Generic Names in Zoology* every available generic name (with a note of the type species of the genus concerned) on which a decision of any kind was given by the Commission (1950, *Bull. zool. Nomencl.* **4** : 268), and on the *Official List of Specific Trivial Names in Zoology*, the trivial name of the type species of every genus placed on the *Official List of Generic Names*, except where that trivial name was not the oldest available such name

for the species concerned, in which case the oldest available trivial name was to be stabilised in this way (1950, *Bull. zool. Nomencl.* 4 : 270).

4. In the light of the decision taken in 1948 on the status of new generic names published in 1771 in Brünnich's *Zoologiae Fundamenta*, the International Commission on Zoological Nomenclature is now being asked to give a ruling that new generic names published in 1777 in Scopoli's *Introductio* are available names under Article 25 (Application Z.N.(S.)587), it being understood that the Commission will give sympathetic consideration to applications for the suppression of individual names published in the *Introductio*, where those names are not in current use and where the enforced resurrection of such names would lead to confusion by upsetting well-established names of later date.

5. Immediately a decision is taken by the International Commission on the foregoing question, it will be possible for it to take decisions also on the other matters left unsettled in *Opinion* 160. If the International Commission approve the recommendation submitted to it in regard to the status of names in Scopoli's *Introductio*, it will be necessary, either :—

- (1) to place (a) the generic name *Anguina* Scopoli, 1777 (with a note of its type species) on the *Official List of Generic Names in Zoology*, and (b) the trivial name of the type species of that genus, if that name is the oldest available trivial name for that species, on the *Official List of Specific Trivial Names in Zoology*; or
- (2) to take a substantive decision on the question (on which it was considered in 1935 that no case had then been established), whether it is desirable that the name *Anguina* Scopoli, 1777, should be suppressed under the plenary powers for the purpose of validating *Tylenchus* Bastian, 1865 or whatever other name is currently used for the genus in question.

6. Before taking into consideration the relative merits of the alternative courses outlined above, the International Commission will need to be furnished by specialists in the Nematoda with information regarding the name currently used for the genus concerned and, if there is still diversity of practice, the proportions in which the names concerned are used both by specialists in the Nematoda and also generally in biological, non-taxonomic literature. In this connection, the Commission will take full account of the views by leading specialists recorded in *Opinion* 160, but, as it is now over fifteen years since those comments were written, it will be necessary to ascertain whether, during the interval that has since elapsed, the position has changed in any, and, if so, in what way. It will be very helpful if at the same time specialists will be so good as to inform the Commission whether they are of the opinion that the strict application of the normal Rules in this case would lead to no unsatisfactory results or, alternatively, whether they are of the opinion that confusion would result from the strict application of the Rules and, in the latter event, to indicate what action is recommended.

7. It is desired to reach a final decision on this long-outstanding case with as little further delay as possible. It will be particularly appreciated, therefore,

if specialists will be so good as to furnish the Commission as soon as possible with their advice on the relative merits of the alternative courses set out in paragraph 5 above. All such comments should be marked "Z.N.(S.)588" and addressed to the Secretary to the Commission (28 Park Village East, Regent's Park, London, N.W.1, England).

**ON THE OBJECTION, FROM THE CARCINOLOGICAL
POINT OF VIEW, OF ACCEPTING THE NAME "TYLOS"
MEIGEN, 1800 (CLASS INSECTA, ORDER DIPTERA) AND
THE CONSEQUENT REJECTION OF THE NAME "TYLOS"
(LATREILLE MS.) AUDOUIN, 1826 (CLASS CRUSTACEA,
ORDER ISOPODA)**

By L. B. HOLTHUIS

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Though I am not too well acquainted with Southern European and extra-European Isopods, I am glad to give you my views on the *Tylos* problem (1951, *Bull. zool. Nomencl.* **2**: 156-160), raised in the letter which Professor Albert Vandel of Toulouse has written to you on this subject.

The species of the Isopod *Tylos* (Latreille MS.) Audouin, 1826, inhabit the sandy sea shores at or slightly above high-water mark. The genus has a wide distribution in the tropical and subtropical regions of the world, Atlantic coast of Europe, south of Brittany, France; shores of the Mediterranean and the Black Sea; West African coast from Senegambia northwards, including the Cape Verde and Canary Islands, the Azores and Madeira; Atlantic coast of America from Florida to Colombia, and also from the Bermudas and the East Indies; Pacific coast of America from California to Patagonia, also from the Galapagos Islands; Indo-West-Pacific region from the Red Sea and South Africa to Japan and New Zealand.

So far as I am aware, the generic name *Tylos* Audouin (often attributed to Latreille) is at present used for this genus of Isopods by all carcinologists. Van Name (1936, *Bull. amer. Mus. nat. Hist.* **71**) used this name in his monograph "The American Land and Fresh-water Isopod Crustacea"; so also did Barnard (1932, *Ann. S. Afr. Mus.* **30**: 179) in his treatment of the South African terrestrial Isopoda, and Jackson (1941, *Smithson. misc. Coll.* **99** (No. 8)) in his "Check-list of the terrestrial and fresh-water Isopoda of Oceania." Further, the foremost European isopodologists such as A. Vandel, K. Verhoeff, H. Stroubal and A. Arcangeli use the name *Tylos* for this well-known genus of Isopods. I am unable to find in the literature any proposal to replace the name *Tylos* Audouin on the ground that it is nomenclatorially invalid.

The genus *Tylos* Audouin is the type genus of the family TYLIDAE, which is recognised by all isopodologists.

The foregoing evidence, in my opinion, clearly shows that from the carcinological point of view, it is highly desirable that the generic name *Tylos* Audouin should be preserved for the genus of Isopoda now known by that name.

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